

NAME:

Home Work 10.  
MAP 2302 - Differential Equations

Solve the following ODE using the Reduction of Order:

1.  $(x^2 + 1)y'' - 2xy' + 2y = 0; y_1(x) = x$

2.  $x^2y'' - 4xy' + 4y = 0; y_1(x) = x$

3.  $y'' - y = e^x$

4.  $y'' + y = \csc x$

5.  $2x^2y'' + xy' - y = x; y_1(x) = x$